system and method for selecting a vacation destination and Accommodation

BACKGROUND OF THE INVENTION

6 1. Field of the Invention

This invention relates broadly to a system and method for data processing. More particularly, this invention relates to an interactive system and method to facilitate the selection of a vacation destination and accommodation by a consumer.

2. State of the Art

There are a number of options available to a consumer over the Internet to provide the consumer assistance in certain aspects of vacation (or holiday) planning. Some sites offer essays on numerous destinations. Wading through the available materials turns vacation planning into a research project. At the other extreme are online booking agent sites which locate airfares and hotels for a stated destination and then permit the consumer to book reservations. These online booking sites provide minimal assistance for the consumer who does not know where he or she wants to vacation or what kind of vacation he or she wants to have. Between the extremes exist myriad other sites which provide a range of services.

For example, several 'personal advisor' sites, e.g.,

www.allexperts.com and www.egulliver.com, provide specialists who

correspond with consumers via email to provide suggestions on

vacation destinations. The specialists are typically freelance

travel consultants who help plan and arrange the travel. However,

the response time is relatively slow and the recommendation is

only as good as the individual specialist.

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Other sites, e.g., www.personalogic.com, utilize a structured questionnaire in which consumers rate their preferences (e.g., from 'strong' to 'weak') on a number of vacation criteria. One of the preferences is to what general geographical destination the consumer wants to travel. The preferences are then extrapolated into recommendations. This analytical methodology provides unconvincing results and requires that the user already have an idea of to where he or she wants to travel.

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18 Another category of sites are 'activity led' sites. 19 sites specialize in vacation packages or accommodations suited to 20 one type of activity, such as golfing (e.g., www.golf-travel.com) 21 or diving (e.g., www.diveguide.com). The sites generally either 22 list their 'best' ranked resorts in which to perform the activity, 23 or provide information on accommodations. Generally, no guidance 24 is provided on which is the best vacation spot for any particular 25 consumer. In addition, for those consumers who have not yet

- 1 discovered that they would like a vacation centered around a
- 2 particular activity, the sites do not provide any assistance;
- 3 i.e., the web site will likely only be accessed once the consumer
- 4 has determined on his or her own that he or she wishes to engage
- 5 in a particular activity.

7 Directory sites, e.g., www.brochurebank.com and

8 www.holidaywizard.co.uk, permit consumers to order print brochures

9 from a range of travel operators. The brochures are then mailed

10 to the consumer. While these sites permit a consumer access to

11 information, they present several major limitations. First, no

12 assistance is provided in requesting brochures. Second, there is

13 a limitation on the number of brochures which can be requested.

14 Third, there is a relatively large lag time for receipt of the

15 brochures. Fourth, the consumer still has to sift through the

16 information in the brochures and make a determination as to where

17 he or she wants to travel.

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19 Other sites, e.g., www.expedia.com and

20 www.holidayswithease.co.uk., allow consumers to search for

21 vacation packages, but are not suitable for consumers who have not

22 yet determined to where they would like to travel; and as

23 discussed above, all other sites require that the consumer know

24 the general region in which he or she would like to travel or have

25 a selected activity prior to choosing a destination. There is no

1	site which interactively guides a consumer who does not generally
2	know to where he or she wants to travel and what he or she want to
3	do while on vacation.
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5	SUMMARY OF THE INVENTION
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7	It is therefore an object of the invention to provide an
8	interactive system which, based on interactive engagement with a
9	consumer, selects a vacation destination for a consumer.
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11	It is also an object of the invention to provide a method for
12	interacting with a consumer and guiding a consumer in choosing
13	vacation destinations.
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15	It is another object of the invention to provide interactive
16	vacation destination selection systems and methods which do not
17	require the consumer to have prior knowledge of where he or she
18	wishes to travel.
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20	It is still another object of the invention to provide an
21	interactive vacation destination selection system and method which
22	inquire of the consumer a 'type of vacation' which the consumer

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desires.

It is a further object of the invention to provide an interactive vacation destination selection system and method, which based on the results of the 'type of vacation' inquiry, presents a plurality of categories each having associated attributes, the selection of the attributes within each category resulting in a selected vacation destination, as well as optional accommodations meeting the needs and wants of the consumer.

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It is an additional object of the invention to provide an interactive vacation destination selection system in which the attributes are represented by images, and the images, in total, operate to summarize the consumer's desired vacation.

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14 In accord with these objects, which will be discussed in 15 detail below, an interactive vacation destination selection system 16 is provided which guides a consumer in choosing where the consumer 17 wants to travel. The vacation destination selection system 18 operates through a back end and a front end. The back end 19 identifies criteria which may be important to a consumer, 20 categorizes the criteria, and assigns images to the criteria. 21 addition, the back end collects data (or attributes) on various 22 vacation destinations serviced by the system and assigns the 23 attributes to the appropriate criteria. The front end to the 24 system assesses what a consumer wants in his or her vacation 25 destination, identifies vacation destinations having the

1 attributes that satisfy those wants, and then displays comparative
2 data on those vacation destinations.

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4 The consumer inputs his or her personal data (e.g., number of 5 travelers, ages of travelers, when the consumer wants to travel, 6 the length of the vacation, the distance from home the consumer is willing to travel, and a budget range), as well as a vacation 7 8 category; that is, the vacation defined in broad terms (e.g., 9 cruise, sun and beach, activity led, countryside, safari, etc.) 10 into the front end of the system. The front end then displays to 11 the user criteria related to the category and selected from the 12 back end data. Each criterion is preferably represented by an 13 image, and the consumer is able to select one or more of the 14 images to identify the consumer's criteria. The images selected 15 are displayed for the user and together provide a visual 16 representation of the type of vacation being sought by the user. 17 The system compares the consumer's input personal data and 18 selected vacation category, as well as criteria related to that 19 category, with the attributes of all vacation destinations in the 20 back end of the system. The system then identifies vacation 21 destinations which satisfy the consumer's vacation wants (based on 22 the selected criteria) and provides to the consumer a detailed 23 objective comparison of vacation destinations having attributes 24 which meet the consumer's selected criteria. It will be 25 appreciated that the system is capable of determining a suitable

1	vacation destination for a consumer even without being provided
2	information as to where the consumer wants to travel.
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4	Additional objects and advantages of the invention will
5	become apparent to those skilled in the art upon reference to the
6	detailed description taken in conjunction with the provided
7	figures.
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9	BRIEF DESCRIPTION OF THE DRAWINGS
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11	Fig. 1 is a schematic of the interactive vacation destination
12	selection system according to the invention;
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14	Fig. 2A through 2D together constitute a flow chart
15	illustrating the method of operation of the vacation destination
16	selection system of the invention; and
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18	Figs. 3 through 19 are exemplar 'screen shots' of the front
19	end interface of the vacation destination selection system.
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21	DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS
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23	Turning now to Fig. 1, according to the invention, a vacation
24	(or holiday) destination selection system 10 includes a central

computer 12 operating a back end data module 14 and a front end

1 interface module 16. The back end module may be implemented as a

2 database of criteria and attributes, as described below, and the

3 front end module may be implemented as a database of HTML

4 (hypertext markup language) files and associated image files

5 which, as also described below, facilitate user interaction with

6 the system. The central computer 12 is in communication with one

7 or more user terminals 18 (e.g., home computers) via the Internet

8 or other computer network. That is, the central computer is

9 preferably a server 12, and the terminals 18 are preferably nodes

10 on the network. The terminals 18 include a display 20 which

11 permits a consumer (user) to view the HTML and image files of the

12 front end module 16 of a remotely located central computer 12, and

13 an input device 22 (e.g., a keyboard, mouse, and/or microphone)

14 which permits the consumer the provide input to the computer 12.

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The back end module 14 includes criteria, described in more detail below, which may be important to a consumer in selecting a vacation destination, and which are organized into categories appropriate for the type of vacation and general location

19 appropriate for the type of vacation and general location

20 selected. Exemplar categories for a beach vacation include:

21 'destinations', 'local area', 'accommodations', 'important for

22 kids', 'things to do', and 'individual needs', which are described

23 in more detail below.

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1 In addition, data (or attributes) collected on various 2 vacation destinations and accommodations serviced by the system 3 are stored in the back end module and assigned to the appropriate 4 criteria. Attribute includes, with respect to particular 5 destinations and accommodations, the cost, the particular 6 activities offered, features of the locality, food options, etc. 7 For example, if a particular modern hotel located on the beach has 8 both a luxury and standard rooms and a pool, and is located just 9 outside a historic village and also has access to various water 10 sports including sailing and snorkeling, the hotel will be linked 11 with the relevant criteria in the relevant categories: 12 'accommodations': 'hotel', 'modern', 'on the beach', 13 'luxury', 'standard', 'pool'; 14 'local area': 'historic'; 15 'things to do': 'sailing', 'snorkeling'. 16 17 According to a preferred aspect of the invention, image files 18 are also assigned to each of the criterion within a category. 19 associated image file may change based upon a consumer's selection 20 of other criteria. The front and back end modules of the system 21 assess what a consumer wants in his or her vacation destination 22 (based on the consumer's input at the terminal), identifies 23 vacation destinations and accommodations having the attributes 24 that satisfy those wants, and then displays on the terminal

1 comparative data on those vacation destinations and accommodations.

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The front end interface module 16 provides an interactive interface which guides the consumer through the selection of criteria desired for a vacation. Then, as described in more detail below, once the criteria have been selected by the consumer, destinations and accommodation having attributes which best meet the wants of the consumer are presented to the consumer for final review by the consumer.

Referring to Fig. 2A, the front end module first requests

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12 that the consumer supply information as to who will be traveling; 13 i.e., who (the name of the consumer inputting the requested 14 information) at 100 and the number of travelers and their age ranges (the number of adults, the number of teenagers, the number 15 16 of children, the number of infants) at 104. The consumer responds 17 by entering the requested information at 102 and 106. 18 consumer is also requested to input when he or she wants to travel 19 at 108 (and responds with a month and year at 110), for how long 20 at 112 (and responds by selection of a time period 1-7 days, 10-14 21 days, etc. at 114), how far away at 116 (and responds with 'this 22 continent' or 'far away' at 118), and a budget range at 120 (and 23 responds with a range of per person costs of up to \$500, \$500-24 \$1000, \$1000-\$1500, \$1500-\$2000, \$2000-\$2500, and greater than

1 \$2500 at 122). Each of the consumer responses 110, 114, 118, 122

2 is stored by the computer.

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4 Referring to Fig. 2B, the front end module additionally 5 requests the consumer to provide at 124 an indication of the

6 general type of vacation that the consumer is seeking, e.g.,

7 cruise, sun and beach, activity led, countryside, safari,

8 exploration tour, multiple locations, etc. The consumer's

9 response to the request is provided at 126 and then stored. All

10 the above responses, other than the consumer name at 102, are

11 preferably input by the consumer via selection of appropriate

12 check boxes or selection of items from pull down lists.

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Then, referring now to Figs. 2B and 3, the front end preferably, though optionally, presents one or more questions to focus the consumer on what he or she wants to achieve on the vacation. A first question 128 presented at 130 is preferably "How do you want to feel on your vacation?". The consumer enters at 132 his or her typed answer, in their own words, in a text box 134. An 'ideas button' 136 is also provided to give the consumer the option at 140 to view previously stored responses of others in order to help formulate the consumer's own answer. The consumer may at 142 select one of the previously stored responses as his or her own answer as an alternative to typing his or her own

response. After the user has entered or selected his or her

- 1 answer, a 'done' button 144 is activated to store at 146 the
- 2 answer. Referring to Figs. 2B and 4, a second question 148 "What
- 3 do you want your overwhelming memory to be?" is presented at 150.
- 4 The consumer may enter his or her own answer at 152 in a text box
- 5 154, or view, at 156, and select at 158 the answer of another.
- 6 The answer is then stored at 160. The stored answers are used in
- 7 a postcard file, described below, and for access by others seeking
- 8 to formulate their own responses.

- Based upon the consumer's previous responses, criteria
- 11 (organized in categories) designed to elicit more particular
- 12 information from the consumer are prepared for presentation to the
- 13 user. Referring now to Fig. 2B, if any one or more categories
- 14 from the standard category set ('destination', 'local area',
- 15 'accommodations', 'important for kids', 'things to do' and
- 16 'individual needs') are not appropriate in view of the previous
- 17 responses by the consumer, the category of criteria may be
- 18 eliminated at 162. For example, if no children are traveling, the
- 19 'important for kids' category is preferably eliminated for that
- 20 consumer. Then, referring to Figs. 2C and 5, based on the type of
- 21 vacation earlier selected by the consumer (e.g., 'beach and sun')
- 22 and the age of the travelers (e.g., adults and children), the
- 23 system displays at 164 on the terminal the remaining categories
- 24 166a, 166b, 166c, 166d, 166e, 166f from the standard category set

such that the consumer may provide information in order to most appropriately select a vacation destination.

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4 The consumer may select any of the categories 166a-f to 5 provide information in any order. Selection at 168 of any of the 6 categories 166a-f brings up appropriate criteria by which the 7 consumer can more particularly define what he or she wants to 8 experience on the vacation. Referring to Fig. 6, preferably 9 twelve criteria 170 and associated image files 172 are displayed 10 in a two-dimensional array at 174 for each category. While each 11 criteria has an associated image file, the image files do not 12 refer to particular destinations, accommodations, etc., but rather 13 are intended to convey a feeling which the consumer is trying to 14 achieve on the vacation by selection of the criteria. 15 example, if a European consumer previously indicated that she 16 wants a European or Mediterranean beach vacation and selects the 17 category of 'destination' 166a, preferably twelve criteria are 18 presented to the consumer; for example, 'sun, sea and sand', 19 'peace and quiet', 'active', 'places to explore', 'dramatic 20 scenery', 'away from it all', 'romantic', 'lively', 'old world', 21 'new world', 'holiday location', and 'cultural location'. The 22 consumer may select at 176 none, one, or more (up to all twelve) 23 of the criteria (by marking check boxes) which best reflect how 24 they want to experience their vacation. The selected criteria are 25 added to a postcard' file, which is described in more detail

1 In addition, several questions (or options) are presented

- 2 at 178 to the consumer regarding the mode of travel (air, water,
- 3 land) 180, the distance willing to travel (in travel time) 182,
- 4 and the weather of the destination (temperature and/or rainfall)
- 5 The responses to these questions at 186 also constitute
- 6 criteria and are stored.

to explore' 172a (Fig. 6).

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By way of another example, if another European consumer 9 previously indicated that he wants a far away beach vacation and 10 is traveling without children, the selection of the 'destination' 11 category will bring up criteria which may differ from the example 12 above; for example, 'adventurous' 172b (Fig. 7) replaces 'places

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15 Referring back to Fig. 2C, after the consumer makes his or 16 her criteria selections in each category in which he or she 17 desires to provide a criteria selection, the system preferably 18 displays at 187 to the user the number of vacation 19 destinations/accommodations remaining in the system that meet the 20 selected criteria.

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22 The consumer may then select criteria from one of the 23 remaining categories shown in Fig. 5. Turning now to Fig. 8, if 24 the category of 'local area' 166b is chosen next, exemplar 25 criteria 188 for selection by the consumer may include: 'on the

- 1 strip', 'out of town', 'scenic views', 'seclusion', 'modern',
- 2 'heritage', 'passion for food', 'glamorous', 'night life',
- 3 'restaurants', 'street cafes', 'local markets'.

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- 5 The consumer then selects criteria from another category.
- 6 For example, referring to Fig. 9, with respect to 'accommodation',
- 7 exemplar criteria 190 include: 'hotel', 'resort', 'apartment',
- 8 'villa', 'luxury', 'standard', 'basic', 'modern', 'traditional',
- 9 'classic property', 'onsite entertainment', 'gym', 'swimming
- 10 pool', 'distance to beach', 'food options', and 'number of rooms'.
- 11 With respect to 'distance to beach', 'food options', and 'number
- 12 of rooms', options may be selected from a drop down list.
- 13 Criteria are selected, and the associated images are added to the
- 14 image postcard. Referring to Fig. 10, with respect to the
- 15 category of 'important for kids', exemplar criteria 192 include:
- 16 'playmates', 'games', 'kids clubs', 'children's pool', 'baby
- 17 sitting', 'high chairs/cots', 'children's menus', 'safe disco',
- 18 'safe beach', 'play area', '4-5 bedrooms', and 'adjoining rooms'.
- 19 Referring to Fig. 11, with respect to the category of
- 20 'activities', exemplar criteria 194 include: 'restaurants',
- 21 'family eating out', 'shopping', 'street cafes', 'being pampered',
- 22 'romantic evenings', 'clubbing', 'bike/car hire', 'beauty spots',
- 23 'historic places', 'museums'. Referring to Fig. 12, with respect
- 24 to the category of 'individual needs', exemplar criteria 196
- 25 include: 'vegetarian meals', 'wheelchair access', 'lift' (or

1 elevator), 'no dogs', 'pets allowed'. The criteria in each

2 category are reviewed by the consumer and desirable criteria are

3 selected. In addition, while not shown, the consumer may add his

4 or her own criteria. The selected criteria and the associated

5 image files are stored in the postcard file.

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After the consumer has completed review of the categories and made his or her selection of desired criteria, the consumer is

9 presented at 198 with a preliminary postcard file 200, as shown in

10 Fig. 13. The preliminary postcard file 200 is a two-dimensional

11 array of the selected criteria and images associated with the

12 selected criteria. If the consumer has selected more criteria

13 than a set maximum number, e.g., fifteen criteria, the consumer is

14 preferably requested at 202 (Fig. 2C), 204 (Fig. 13) to select

15 which criteria to 'keep' and which criteria to 'drop' to bring the

16 number within the maximum number. When required, the consumer

17 indicates which criteria to 'keep' or 'drop' by selection of

18 'keep' 206 and 'drop' 208 from a drop down list 210 associated

19 with each criteria. 'Dropped' criteria are nevertheless

20 preferably taken into account in evaluating vacation destination

21 recommendations for a consumer. Alternatively, three options may

22 be provided: 'keep', 'drop', and 'remember', in which 'dropped'

23 criteria are not later taken in to account, and 'remembered'

24 criteria are taken into account but given lesser weight than

25 'kept' criteria.

1 Referring to Figs. 2D and 14, once the consumer has reduced 2 at 212 the number of criteria to within the maximum number, the 3 consumer is presented with an updated preliminary postcard file 4 214 at 216. The consumer is then preferably requested, at 216 5 (Fig. 2D) and 218 (Fig. 218), to prioritize the remaining criteria 6 by ranking the several, e.g., five, most important criteria to the 7 consumer. The consumer ranks at 220 the most important criteria 8 preferably with a pull down list 222 under each of the remaining 9 criteria. This operates to weight the ranked criteria more 10 heavily in the selection process, but preferably does not operate 11 to eliminate the other criteria in the updated preliminary 12 postcard file as factors in the selection process.

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14 After the criteria have been ranked by the consumer, the 15 system makes a determination of which vacation destinations most 16 meet the needs of the consumer. This is done by comparing the 17 attributes of the vacation destination in the system with the 18 criteria of the consumer taking into account the consumer's 19 weighted ranking of the most important criteria. In addition, 20 referring to Figs. 2D and 15, a final postcard file 228 is 21 prepared and displayed at 230 for the consumer. 22 postcard file 228 includes the criteria names and associated image 23 files for the 'kept' criteria 232, with the top-ranked criteria 24 232a displayed most prominently, e.g., across the top of the 25 postcard. In addition, the final postcard file includes the

- 1 consumer's responses 234, 236 to the initial questions of "How do
- 2 you want to feel on your vacation?" and "What do you want your
- 3 overwhelming memory to be?"; i.e., the responses stored at 146,
- 4 160. In addition, the postcard file includes a link (or
- 5 hyperlink) 238 to a display of the recommended vacation
- 6 destinations (which can be selected at 240), a link 242 to a list
- 7 of the reasons for the recommendations (which can be selected at
- 8 244), and a link 246 to side-by-side comparisons of the
- 9 recommendations (which can be selected at 248).

11 If the consumer selects the link 238 to the display of the

12 recommended vacation destinations, a display 250 such as shown in

13 Fig. 16 is provided at 252 to the consumer. The display 250

14 preferably includes for each vacation destination 253a, 253b, a

15 photograph 254, a map 256, basic information on the locale 258,

16 the weather 260, a URL (uniform resource locator) hyperlink to

17 more information 262, recommended accommodations 264, prices 266,

18 access 268, and availability 270.

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20 If the consumer selects the link to the list of the reasons

21 for the recommendations, a worksheet 272 such as shown in Fig. 17

22 is provided at 273 to the consumer. The worksheet 272 indicates

23 the choices made with respect to the 'destination' 274, 'local

24 area' 276, and 'accommodation' categories 278. The worksheet

25 displays the number of destinations remaining 280 after each

1 criteria selection by the consumer. The consumer is able to edit,

2 via selection of 'edit' buttons 282 and 'on/off' buttons 284 the

3 reasons and see how such changes affect the recommendations. For

4 example, Fig. 18, the worksheet 272 indicates that by changing

5 various criteria (permitting greater rainfall at 286 and not

6 limiting the accommodation to a resort at 288) additional

7 recommendations 290 for a vacation destination are made by the

8 system. Throughout the interactive selection process the number

9 of possible options which satisfy the selection criteria are shown

10 thereby ensuring the consumer can see the number of remaining

11 options.

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Fig. 19 displays the side-by-side comparisons 292 of the recommendations, permitting the consumer to analyze in detail various details of the recommendation (e.g., size of the accommodations, full board options, distance to beach, number of swimming pools, restaurants and bars, whether the accommodations have a fitness center, sauna, casino, or golf course, etc.) to facilitate making a final choice. Finally, the consumer may select one of the recommended vacation packages for purchase. To facilitate the purchase, a referral link may be provided to an online ticket and hotel booking service, a phone number for a travel agency may be provided, or the front and back end modules may include the necessary forms and data, which are known in the

art, to complete the transaction.

By providing basic information on the travelers, and general information on how far the travelers are willing to travel, the preferred weather conditions, a budget range, and the selection of criteria from one or more categories, the system 10 is capable of determining a suitable vacation destination, even without being provided information as to where the consumer wants to travel.

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8 There has been described and illustrated herein an embodiment 9 of an interactive system for the selection of a vacation 10 destination and a method of selecting a vacation destination. While a particular embodiments of the invention has been 11 12 described, it is not intended that the invention be limited 13 thereto, as it is intended that the invention be as broad in scope 14 as the art will allow and that the specification be read likewise. 15 Thus, while the consumer is presented with a number of categories 16 from which to choose criteria, the consumer does not need to 17 review the criteria in all the categories; an appropriate 18 selection of a vacation destination may nevertheless be made by 19 the system, provided that criteria in a non-reviewed category are 20 not essential to the consumer's enjoyment of the vacation. 21 addition, while particular criteria have been disclosed for use 22 within the various categories, it will be appreciated that other 23 categories, e.g., sports available, and other criteria within the 24 disclosed categories may be used as well. Furthermore, while the 25 vacation destination selection system is preferably implemented

- 1 with a global computer network, it will be appreciated that the
- 2 system may also be implemented in another interactive medium, for
- 3 example, an in-travel agency kiosk, portable digital media, e.g.,
- 4 CD-ROMs and DVDs, or via interactive television, such that a
- 5 stand-alone (non-networked) computer system or television is
- 6 utilized to implement the system. Moreover, while a front end
- 7 module and back end module are discussed as distinct databases, it
- 8 will be appreciated that the modules may operate as portions of a
- 9 common database. In addition, while two preferred focus questions
- 10 are disclosed for preferable presentation to the consumer, other
- 11 or additional questions may be used. Moreover, while the focus
- 12 questions are intended to aid in consumer selection of criteria as
- 13 well as be displayed on the postcard, it will be appreciated that
- 14 a natural language parser may be used to incorporate the response
- 15 into the vacation destination selection process. Also, while the
- 16 front end is preferably implemented in a series of HTML files, it
- 17 will be appreciated that other file types (e.g., VRML, JAVA
- 18 applets, etc.) may also be used to implement the front end. It
- 19 will therefore be appreciated by those skilled in the art that yet
- 20 other modifications could be made to the provided invention
- 21 without deviating from its spirit and scope as claimed.